



WASHINGTON STATE  
DEPARTMENT OF  
**E C O L O G Y**

## **PESTICIDES CAN BE HAZARDOUS WASTE.**

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# **Pesticide Application**

## **HAZARDOUS WASTE DO'S AND DON'TS**

*Hazardous pesticide wastes pose real threats to real people... they can cause cancer, nerve damage, reproductive disorders, pollute air and drinking water, and contaminate soil. They don't belong down the drain, in the dumpster, or dumped in a field.*

Your business or organization may generate waste pesticides or pesticide-containing wastes... for example, rinse waters from cleaning pesticide application equipment and containers with pesticide residue. Hazardous waste regulations protect human health and the environment - your health and your family's health.

Here's some other reasons to take hazardous waste regulations very seriously:

- ✓ You are legally and financially responsible for the proper handling of your wastes.
- ✓ You'll maintain your ability to get insurance or bank loans by correctly managing your wastes.
- ✓ You minimize the risks of not being able to sell your property because of contamination.
- ✓ You may save money in the long run by finding ways to reduce or recycle your wastes.

The Department of Ecology (Ecology) can help you understand and comply with hazardous waste regulations that apply to pesticides. This fact sheet should help, and you can call Ecology's Hazardous Waste and Toxics Reduction Program if you have a question (see back page for office nearest you.)

Businesses that store and use pesticides as part of their operations generate a variety of pesticide wastes, many of which may be hazardous. Some of the wastes are specifically **listed** as hazardous in the *Dangerous Waste Regulations*. Others may be regulated because they exhibit certain hazardous **characteristics** (ignitability, corrosivity, reactivity or toxicity) or because they meet Washington states **criteria** of toxicity or persistence. Unused pesticide products can be hazardous waste when you decide to dispose of them, or if they have been banned from use.

## **WHEN ARE PESTICIDES A HAZARDOUS WASTE?**

## **UNWANTED, OUT-OF-DATE, AND BANNED PESTICIDES**

To reduce the pesticide wastes you generate:

- ✓ mix only what you need;
- ✓ keep different wastes separated to enhance recycling potential;
- ✓ avoid mixing together non-hazardous and hazardous wastes; and
- ✓ purchase only what you need for the current use season.

There may be old, damaged, banned, or otherwise unusable pesticides in your storage room that you may not know how to get rid of properly. Unusable pesticides are probably hazardous wastes. They may be regulated in amounts as little as a quart (or 2.2 lbs.). If a pesticide is unusable by you, it is possible that it may still legally be used by someone else. If you are not able to find a legitimate user, then the pesticide is a waste, and you are legally responsible for properly disposing of it.

The Washington State Department of Agriculture administers a waste pesticide program which collects and disposes of canceled, suspended or unusable pesticides from eligible state residents and businesses.

You can call them at (360) 902-2050 or e-mail them at [wastepesticide@agr.wa.gov](mailto:wastepesticide@agr.wa.gov) to see if you are eligible to participate in the program. Visit their web site at <http://agr.wa.gov/pestfert/pesticides/wastepesticide.htm> for more information.

If you have unusable **home and garden** pesticides contact your city or county solid waste utility, and ask about their household hazardous waste collection program. You can also visit the web site [www.I800cleanup.org](http://www.I800cleanup.org) and enter your zip code to learn about local disposal and recycling opportunities.

**Following are some tips to help reduce your unwanted pesticide inventory:**

**Do's**

- ✓ Try to find a legitimate user for them.
- ✓ Use inventory in the order purchased to avoid the need to dispose of old, outdated materials.
- ✓ Buy wisely. Purchase only what you really need, as you need it. (What may seem like a bargain at the time can turn into a major disposal cost if it becomes unusable.)

**DON'T'S**

- ✗ Don't delay proper disposal of wastes at a hazardous waste management facility.
- ✗ Don't pour them down a drain or into a ditch (this is illegal, and you may contaminate water supplies).
- ✗ Don't store your inventory where it could be affected by moisture or temperature.

## **WHAT ARE SOME COMMON PESTICIDE APPLICATION WASTES?**

Mixing and applying pesticides can generate a variety of wastes. The most common ones are: **left over tank mix; application equipment clean-up wash water; empty containers and rinsates from rinsing empty containers; and spill residues.** You are legally responsible for determining if any of these wastes are hazardous. If they are, you must properly manage them as hazardous waste. Following are some ways to reduce and manage these wastes.

### **LEFTOVER TANK MIX**

This waste stream represents a large percent of total agrichemical waste volume and is also a substantial waste from structural applications.

**This waste can be almost eliminated by following these suggestions:**

**Do's**

- ✓ Sequence your applications in such a way so that you are not constantly switching chemicals.
- ✓ Dedicate equipment to compatible spray solutions to reduce cleaning needs.
- ✓ Save leftover spray solution for the next application or for make-up solution in the next batch.
- ✓ Always follow label directions exactly for proper application, cleanup and disposal.
- ✓ Label containers with the date, name and hazards of the pesticide if leftovers are saved for future use.
- ✓ Calibrate equipment to achieve precise application.

**DON'TS**

- ✗ Don't use the same sprayer for herbicides and insecticides, if possible. This will help reduce the amount of rinse water you need for equipment cleaning.
- ✗ Don't mix more than you need.

## **WASH WATER**

After outdoor applications, try to rinse the inside of application equipment (tank, pump, plumbing, spray lines) in the field where the rinsate can be applied according to label instructions. Use a small onboard saddle tank for carrying clean washwater to the field site.

If you can't rinse in the field, try to clean equipment at a mixing-loading/cleaning station or an "operational area containment facility" which is designed to collect washwater for reuse. If you use more than a certain amount of pesticide per year, Washington Department of Agriculture requires an "operational area containment facility" that meets specific construction standards. Washwater containment makes economic sense because proper containment can reduce product costs and liability claims from environmental contamination.

**Here are some tips on cleaning application equipment and managing washwater:**

### **Do's**

- ✓ Clean your equipment with high pressure, low volume wash equipment and apply washwater only to the application sites.
- ✓ If you can't clean out the equipment at the application site, build a containment area to capture washwater for re-use as make-up water for later applications.
- ✓ If you wash equipment at the application site, alternate the wash area within the application site to prevent buildup.

### **Don'ts**

- ✗ Don't mix different wash waters together if you plan to re-use them.
- ✗ Don't wash equipment within 300 yards of a well, creek, pond, lake, drainage ditch, or storm drain.
- ✗ Don't forget to check the pesticide label for any instructions that may apply to the way you clean your equipment.

## **“EMPTY” CONTAINERS**

Make sure containers are legally empty. Most pesticide containers are not considered “empty” until they have been pressure-rinsed or rinsed three times (“triple-rinsed”). Unrinsed containers are usually regulated as hazardous waste.

Most clean, rinsed plastic pesticide containers can be recycled. Northwest Ag Plastics, Inc. (509) 961-8524, or [www.nwagplastics.com](http://www.nwagplastics.com) operates a free recycling program for empty plastic pesticide containers.

### **The following Do's and Don'ts will help you manage empty pesticide containers properly:**

#### **Do's**

- ✓ Drain containers into the mix tank for 30 seconds after each rinsing.
- ✓ Empty paper containers completely (paper containers with plastic liners can be rinsed).
- ✓ “Triple-rinse” or pressure-rinse all containers and add the rinse water directly to the spray tank mix.
- ✓ Consult with your dealer-distributor to determine when local recycling opportunities are available.

#### **DON'TS**

- ✗ Don't dispose of unrinsed containers in dumpsters or local landfills.
- ✗ Don't pour rinse water onto the ground or down the drain.
- ✗ Don't burn empty containers that may produce toxic vapors.
- ✗ Don't abandon or store empty containers where unauthorized people have access to them.
- ✗ Don't recycle plastic pesticide containers along with food grade containers such as milk jugs or beverage bottles.

## **SPILL RESIDUES**

Cleanup of pesticide spills can result in contaminated residues in soil, water, or absorbent materials that need to be properly managed. If the amount of all spill residues is greater than 220 pounds (about half of a 55-gallon drum), the residues are typically regulated as hazardous waste.

### **Follow these Do's and Don'ts if you have a pesticide spill:**

#### **Do's**

- ✓ Put on adequate protective clothing and, if appropriate, breathing apparatus before responding to a pesticide spill or accident.
- ✓ Have a spill control plan with assigned and trained staff.
- ✓ Have spill containment materials and personal protective equipment ready for use at appropriate locations.
- ✓ Immediately report all spills of potential environmental or health significance. Call either the Division of Emergency Management's 24-hour Emergency Line (800) 258-5990, or one of Ecology's regional offices.
- ✓ Try to isolate the spill and save it for later application, if legal to do so (see the pesticide label).
- ✓ If unusable, containerize spill residue for proper disposal (it may designate as a hazardous waste).
- ✓ Use a diked work area for mixing/loading so that any spills are contained.

#### **Don'ts**

- ✗ Don't throw spill residue into a dumpster.
- ✗ Don't dump spill residue on your property.
- ✗ Don't forget that you are financially and legally responsible for spill damages.

## **HOW TO GET MORE INFORMATION**

To order the following publications, call Dave Zink at (360) 407-6752. To download them from Ecology's web site, go to <http://www.ecy.wa.gov/biblio/hwtr.html>.

*Step by Step: Fact Sheets for Hazardous Waste Generators*, (publication #91-12, revised June 2003). This is a quick summary of your legal responsibilities as a hazardous waste generator.

*Hazardous Waste Services Directory*, A directory to help you identify and contact businesses that can assist in managing your hazardous wastes. Available online at <http://www.ecy.wa.gov/apps/hwtr/hwsd/default.htm>

*Pesticide Container Cleaning and Disposal*, (publication #01-04-024). A bilingual brochure that provides guidance on proper rinsing and handling of empty pesticide containers.

*Reducing and Managing Wastes from Catch Basins*, (publication #94-186). Describes how to reduce and manage sump wastes and contaminated sediments.

*Spill Reporting and Cleanup in Washington State*, (publication #94-187). Describes what your legal obligations are if you have a hazardous materials spill.

*Washington State Dangerous Waste Regulations*, Chapter 173-303 WAC, Washington State Department of Ecology, publication #92-91, April 2003.

Washington State University Extension service has several publications that discuss proper handling and management of pesticides, including:

*Washington Pesticide Laws and Safety*

*Pesticides: Safe Handling*

*The Truth About Pesticides*

To access these and other publications, go to their web site at <http://pubs.wsu.edu/cgi-bin/pubs/index.html>

**WASHINGTON STATE  
DEPARTMENT OF ECOLOGY**

General Information  
(360) 407-6000

Web site  
*http://www.ecy.wa.gov*

Hazardous Waste & Toxics Reduction Program  
(360) 407-6700

Regional Offices:

|           |            |                |
|-----------|------------|----------------|
| Central   | (Yakima)   | (509) 575-2490 |
| Eastern   | (Spokane)  | (509) 329-3400 |
| Northwest | (Bellevue) | (425) 649-7000 |
| Southwest | (Olympia)  | (360) 407-6300 |

**WASHINGTON STATE  
DEPARTMENT OF  
AGRICULTURE**

General Information  
(360) 902-1800

Web site  
*http://agr.wa.gov*

Pesticide Management Program  
(360) 902-2010      Toll free (877) 301-4555

Pesticide Investigations & Technical Assistance  
(360) 902-2040      Toll free (877) 301-4555

Pesticide Disposal  
(360) 902-2056      Toll free (877) 301-4555  
E-mail: *wastepesticide@agr.wa.gov*  
Web site: *http://agr.wa.gov/pestfert/pesticides/wastepesticide.htm*

Pesticide Container Recycling  
Northwest Ag Plastics  
(509) 961-8524  
Web site: *www.nwagplastics.com*

*If you need this information in an alternate format, please call the Hazardous Waste and Toxics Reduction Program at 360-407-6700. If you are a person with a speech or hearing impairment, call 711, or 800-833-6388 for TTY.*

